

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Kazuhito Kojima et al.

Application No.: 10/606,184

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For: DATABASE SYSTEM AND A METHOD OF
DATA RETRIEVAL FROM THE SYSTEM

Examiner: S. F. Lin

RESPONSE TO NON-COMPLIANT AMENDMENT

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Notice of Non-Compliant Amendment, applicant submits the attached revision of Section V of the previously filed Appeal Brief.

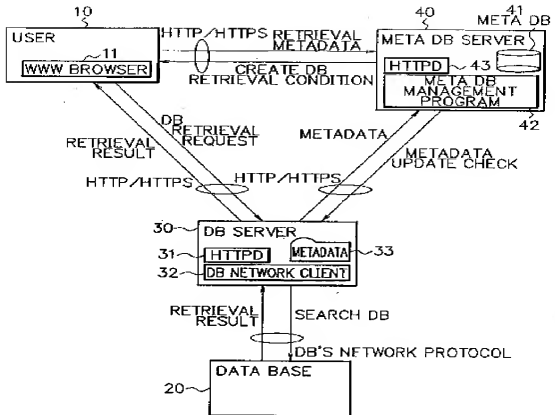
V. SUMMARY OF CLAIMED SUBJECT MATTER

Kojima et al. discloses a method of data retrieval using metadata, pertaining to real data stored in at least one database (DB) , that is collected and managed in a single meta DB server, wherein the metadata that match a retrieval request are extracted by searching of the meta DB server and bypassing the server of the at least one database.¹ In particular, as shown in **FIG. 2** below, Kojima et al. discloses a user terminal **10** that inputs a keyword for search, issues a retrieval request, displays a retrieval result; a database (DB) **20** which stores actual data; a DB server **30** further comprising a retrieval request receiving module **31**, a retrieval executing module **32**; and a DB network client **32**; and a meta DB server **40**.²

¹ U.S. Patent Publication No. US 2004/0010493 at **ABSTRACT** and claims.

² *Id.* at FIG. 2, paragraphs [0069] to [0073].

FIG. 2



Further, **FIG. 4 of Kojima et al.** discloses the method of data retrieval of claims 1 and 9 comprising a series of search processes in correspondence with the user terminal **10**, data base (DB) **20**, DB server **30**, and meta DB server **40**. In particular, the flow chart of **FIG. 4 of Kojima et al.** discloses the administrator of the DB server **30** creates and registers/saves metadata **33** that pertain to the DB **20** in step **S1** of **FIG. 4**.³ These metadata **33** can be looked up from other machines on the network **50** via the HTTPD **31** on the DB server **30**. In step **S2** of **FIG. 4**, the administrator of the meta DB server **40** registers information required for acquiring/collecting metadata **33** from the DB servers **30**. After information of each DB **20** to be supported is registered, the meta DB server **40** acquires metadata **33** pertaining to the registered DBS **20** for the DB servers **30** in step **S3** of **FIG. 4**, and registers the acquired metadata **33** in the meta DB **41** in step **S4**.⁴ When a

³ Specification at **FIG. 4**, page 25, lines 23-27.

⁴ Specification at FIG. 4, page 26, lines 3-27.

search is made, the user inquires of the meta DB server 40 using a World Wide Web browser in step S5 of FIG. 4 and the meta DB server 40 searches for DBS 20 that matches the user's inquiry using the meta DB 41 in step S6 of FIG. 4.⁵ In step S7 of FIG. 4, a retrieval condition creation form page (GUI control window) is formed using the retrieval result and metadata and sends it to the user terminal 10.⁶ In step S8 of FIG. 4, the user checks if the retrieval result is satisfactory and if not, returns to step S5 of FIG. 4.⁷ If satisfactory, the flow advances to step S9 of FIG. 4, where the user creates a retrieval condition used for retrieving real data from the extracted DB 20 using the presented retrieval condition and issues it as a retrieval request to the DB server 30.⁸ Upon receiving the retrieval request, the DB server 30 translates the retrieval request into a format that matches the DB 20 in step S10 of FIG. 4.⁹ Upon reception of the translated retrieval request, the DB server 30 issues a retrieval request to the DB 20 in place of the user to search and retrieve real data in step S11 of FIG. 4.¹⁰ The retrieval result is sent back to the user terminal 10 and displayed in step S12 of FIG. 4.¹¹

Thus, with support of the above disclosure, Kojima et al. claims, as recited in independent claim 1 below and as similarly recited in independent claim 9:

[A] method of data retrieval by a user from a distributed database, comprising:
 saving metadata pertaining to real data stored in databases distributed on a network in first servers distributed on the network associated with each of said databases (FIG. 4, ref. S3, S4; page 9, lines 18-19; page 26, lines 16-21);
 collecting metadata saved in said first servers and storing said metadata in a metadata database of a second server without storing the real data represented by said metadata (FIG. 4, ref. S3, S4; page 9, lines 17-18; page 26, lines 16-21);

⁵ Specification at FIG. 4, page 27, lines 1-12.

⁶ Specification at FIG. 4, page 27, lines 13-18.

⁷ Specification at FIG. 4, page 27, lines 19-27.

⁸ Specification at FIG. 4, page 27, lines 19-27.

⁹ Specification at FIG. 4, page 28, lines 1-12.

¹⁰ Specification at FIG. 4, page 28, lines 1-20.

¹¹ Specification at FIG. 4, page 27, lines 10-30.

extracting metadata that matches a user retrieval request from a user terminal by searching metadata stored in said metadata database, and transmitting a retrieval result including information of a location of the first server saving the metadata that matches said user retrieval request, to said user terminal (FIG. 4, ref. S6; page 9, lines 19-21, page 27, lines 8-9);

inputting a real data retrieval condition for the database on the basis of the retrieval result of the metadata database transmitted to said user terminal (FIG. 4, ref. S7; page 9, lines 22-23; page 27, lines 9-11);

issuing a real data retrieval condition from said user terminal to the first server on the basis of said information of a location of the first server (FIG. 4, S9; page 9, lines 21-22; page 27, lines 16-18),

wherein said real data retrieval condition is issued to said first server by bypassing said second server (FIG. 4; page 26, lines 16-21); and

retrieving, by the first server, the real data from the corresponding database after converting said real data retrieval condition into a format which is concordant with the database (Fig. 4, S10; page 28, lines 1-2).

Conclusion

If a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 21776-00033-US1 from which the undersigned is authorized to draw.

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Respectfully submitted,

Electronic signature: /Myron Keith Wyche/
Myron Keith Wyche
Registration No.: 47,341
CONNOLLY BOVE LODGE & HUTZ LLP
1875 Eye Street, NW
Suite 1100
Washington, DC 20006
(202) 331-7111
(202) 293-6229 (Fax)
Agent for Applicant